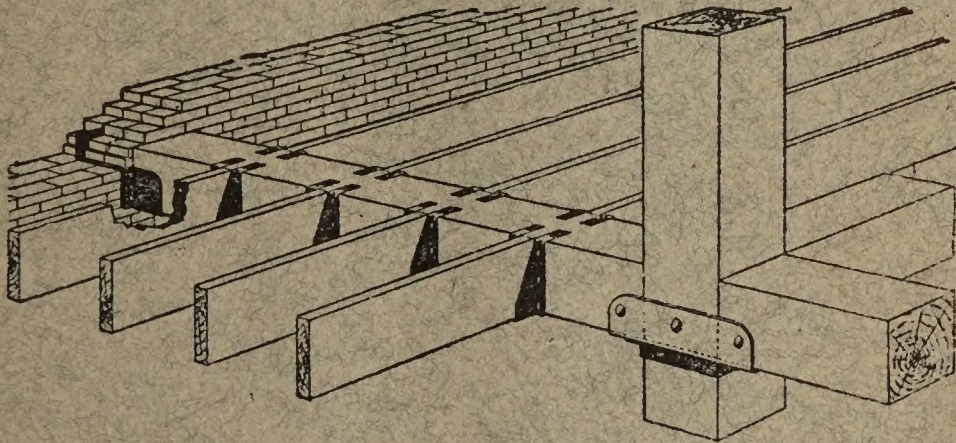


CATALOG No. 80-A

JOIST HANGER DEPARTMENT



Plan of Framing showing Regular Hangers, Wall Hangers
and Three-way Post Cap

J. B. HUNTER CO.
HARDWARE

60 SUMMER ST.

BOSTON, MASS.

3-

The Van Dorn Iron Works Co.

JOIST HANGER DEPT.

CLEVELAND,
OHIO



CATALOG No. 80-A

*The Most Durable and Inexpensive Hangers
on the Market and also the
Easiest to Apply*

PLEASE NOTE

Our Factory is equipped with modern machinery; this applies to each and every Department.

The Joist Hanger Department has recently installed additional equipment in the way of Electric Welding Machines, the purpose of this installation being, to facilitate the lowering of production cost and expedite delivery.

Present cost of orders show us we have gained our point and are therefore in position to quote you extremely low prices on all commodities shown in this catalogue.

SPECIAL ATTENTION

Price Lists in this Pamphlet supersede those in all former issues.

Quotations made are for prompt acceptance and are subject to change without notice.

Orders through Sales Agents are subject to our approval.

All agreements are subject to strikes, accidents or causes beyond our control.

Shipments are made at owner's risk, unless otherwise arranged.

TERMS—Net cash within 30 days, f. o. b. cars Cleveland, unless otherwise agreed. No exchange or transportation charges allowed except by special agreement.

We guarantee all the goods we make or sell to be first-class in every respect, and will replace them if found to be defective, but no charge for loss of labor or material on account of same will be allowed.

INTRODUCTORY

We have tried to convey in this, our Catalog No. 80, plain facts and have avoided as much as possible all use of superlatives in description of our goods.

To our minds it is an insult to the intelligence of the Buyer to state that the very highest quality of materials enter into an article offered for sale at one-third or one-half the market value of the material from which it is claimed to be made.

The advancement in the manufacture of material which enters into the modern building has become so well known, as to no longer incite unusual comment, and the products illustrated and described in this catalog have become imperative to meet the demands in the varied types of building construction.

Our guarantee on all our goods is, "just as represented," and if for any reason they are not satisfactory, we will make an equitable exchange, as it is to our interests as well as yours to see that every article that you receive from our Factory is the best that can be produced.

Our Factory is completely equipped with modern tools, which, combined with the constant employment of a large force of skilled mechanics with long experience in our line of manufacture, insures the maintenance of the high standard of our products as well as the prompt shipment of all orders, and we solicit your business on the merits of the above.

THE VAN DORN IRON WORKS CO.

Joist Hanger Department

CLEVELAND, OHIO

TRADE

Van Dorn

MARK

General Iron and Steel Manufacturers

INCLUDING

JOIST HANGER DEPT.

STRUCTURAL STEEL DEPT.

METALLIC FURNITURE DEPT.

ORNAMENTAL IRON DEPT.

STEEL JAIL DEPT.

INQUIRIES SOLICITED

Send Us Plans and Specifications for Estimate

PHYSICAL TESTING LABORATORY
DEPARTMENT OF APPLIED MECHANICS AND HY-
DRAULICS, CASE SCHOOL OF APPLIED SCIENCE
CLEVELAND, OHIO

Tests of Post Caps and Hangers for the Van Dorn Iron Works
Company

By W. T. Heck, Cleveland, Ohio, August 7 and 8, 1913

PURPOSE:—The purpose of these tests was to obtain the breaking load under as near a duplication of actual conditions as possible and to determine the effects upon the caps and hangers at different stages of increase of loading.

DESCRIPTION OF TESTS:—The tests were conducted upon an OLSEN 200,000 lb. testing machine, whose weighing table is 3 ft. across by 15 in. clear between tension screws. Two 2-way post caps and six (6) No. 1 hangers were tested as hereinafter described.

GENERAL SUMMARY OF RESULTS:—The tests upon the post caps clearly demonstrated that at loads producing failure of oak beams, the caps were apparently unaffected. The tests of the No. 1 hangers show that at loads in excess of the capacity of the floor beams, the hangers are unaffected, and when failure occurs, it is caused by the splitting of the header, allowing the prongs of the hanger to become straightened.

DESIGNATION OF TESTS:—The tests herein reported will be designated as follows:

12 inch 2-way post cap.....	No. 1 test
6 " " " "	No. 2 "
No. 1 Hanger, 4 x 12 oak.....	No. 3 "
No. 1 " 2 x 12 pine.....	No. 4 "
No. 1 " 4 x 12 "	No. 5 "
No. 1 " 8 x 10 "	No. 6 "
No. 1 " 12 x 12 "	No. 7 "
No. 1 " 6 x 10 "	No. 8 "

DEPARTMENT OF APPLIED MECHANICS AND HYDRAULICS
CASE SCHOOL OF APPLIED SCIENCE
CLEVELAND, OHIO

TEST No. 1

12 INCH 2-WAY POST CAP TESTED AUG. 7, 1913
WITNESSED BY MESSRS. SMITH AND VAN DORN

The cap was prepared as shown in the accompanying sketch, Fig. 1. The center post A, at the bottom, had the steel yoke sunk so as to present a smooth compression face of 12 x 12 in. on the table of the machine. The end supports, C and D, were 4 x 12 in. and of proper height to give a bearing on the center post and the two ends at the same time. The load was applied as shown, the yoke of the testing machine transferring the compression to the cap through a spherical compression block, E.

With the arrangement described above, the load was applied slowly up to 150,000 lbs. At this load, the blocks, F and G, applying the load to the beams, started to sink into the beams, and splitting at the outside ends resulted. Increase of loading beyond this point could not be sustained when the machine stopped, and continued running the machine simply continued the failure of the beams. Therefore the test was stopped. The metal of the cap showed no effect of the loading at 150,000 lbs., when the wooden beams started to fail by compression on a 4 x 12 in. surface.

The end supports, C and D, were now **withdrawn** and the load gradually applied, with observations as follows:

64,000 lbs.—Metal of cap not apparently affected.

122,000 lbs.—The wooden beams bulged and started to fail by compression. The metal bulged out by the wood, but no bending noticeable.

Loading beyond this point could not be sustained and failure of beams by compression at the point of application of the load would have followed. This failure by compression was accompanied by the beams withdrawing from the center post, and when the test was stopped the beams had withdrawn $\frac{3}{8}$ inch from the post.

With either method of loading the test clearly demonstrated that the metal post cap will carry any load up to the point of failure of the wood without apparent effect.

DEPARTMENT OF APPLIED MECHANICS AND HYDRAULICS
CASE SCHOOL OF APPLIED SCIENCE
CLEVELAND, OHIO

TEST No. 2

6-INCH 2-WAY POST CAP

TESTED AUG. 8, 1913

WITNESSED BY MR. SMITH OF THE VAN DORN
IRON WORKS COMPANY

The cap was prepared as shown in Fig. 1, except instead of wooden blocks, F and G, metal blocks with 3 x 6 inch bearing was used.

The load was applied gradually up to 50,000 lbs., when the metal blocks, F and G, started to settle into the beams. At this load the metal cap was apparently unaffected.

The end blocks, C and D, were now removed, and in place of blocks, F and G, short pieces of railroad metal were placed on the wooden beams and the load applied as in Fig. 2.

With this arrangement, a load of 50,000 lbs. showed a settling of the wooden beams into the metal, and the load seemed to be applied too near the post, tilting the rails and forcing the beams away from the posts. As it was feared the rails might spring out of position, the loading was changed to the arrangement shown in Fig. 3.

With the loading as in Fig. 3, at 60,000 lbs., the metal yields by the bending of the over-hanging part of the cap under the beams.

The maximum load that could be sustained was 85,000 lbs. At this load the bending of the ends is quite noticeable, and is accompanied by the buckling of the metal at the center.

The test was continued to failure, and the maximum load carried, but not sustained, was 115,000 lbs.

At failure, complete bending and buckling of the cap had occurred.

This cap carried a load of 50,000 lbs. without apparent effect.

DEPARTMENT OF APPLIED MECHANICS AND HYDRAULICS
CASE SCHOOL OF APPLIED SCIENCE
CLEVELAND, OHIO

TEST No. 3

No. 1 HANGER, 4 x 12 OAK BEAM.

4 x 12 x 12 OAK HEADERS. TESTED AUGUST 7, 1913

WITNESSED BY MR. SMITH OF THE VAN DORN
IRON WORKS COMPANY

Attachment to headers and beam perfect. See Fig. 4 for arrangement for test.

Notes on the Loading:

- 10,000 lbs.—No apparent effects.
- 15,000 lbs.—Slight settling of the wood into the metal.
- 20,000 lbs.—Slight belly at the bottom of the hangers due to the settling of the wood.
- 25,000 lbs.—Slight increase of belly and settling.
- 30,000 lbs.—All effects slightly increased. Raising of the prongs just noticeable.
- 35,000 lbs.—Same as 30,000 lbs.
- 40,000 lbs.—Several cracks heard due to the cracking of the wood of the header or sudden drawing of the spikes in the prongs.
- 45,000 lbs.—General failure of the beam and headers starting.
- 48,000 lbs.—Complete failure.

DEPARTMENT OF APPLIED MECHANICS AND HYDRAULICS
CASE SCHOOL OF APPLIED SCIENCE
CLEVELAND, OHIO

TEST No. 4

No. 1 HANGER, 2 x 12 PINE BEAM.

6 x 12 x 12 PINE HEADERS. TESTED AUGUST 8, 1913

WITNESSED BY MR. SMITH OF THE VAN DORN

IRON WORKS COMPANY

Attachment to headers and beam perfect. See Fig. 4 for arrangement for test.

Notes on the Loading:

5,000 lbs.—No effects.

10,000 lbs.—No effects.

12,000 lbs.—Beam shows compressive failure where it rests in hangers. The top of the beam crushing where the load is applied.

15,000 lbs.—Failure of header starting.

20,000 lbs.—Continued failure of the wood, both headers and beam.

No noticable effect on the metal.

24,000 lbs.—Maximum load before the failure of the wood, when the wood of the header failed, the prongs of the hanger straightened out.

DEPARTMENT OF APPLIED MECHANICS AND HYDRAULICS
CASE SCHOOL OF APPLIED SCIENCE
CLEVELAND, OHIO

TEST No. 5

No. 1 HANGER, 4 x 12 PINE BEAM.

6 x 12 x 12 PINE HEADERS. TESTED AUGUST 8, 1913

WITNESSED BY MR. SMITH OF THE VAN DORN
IRON WORKS COMPANY

Attachment to headers and beam perfect. See Fig. 4 for arrangement for test.

Notes on the Loading:

10,000 lbs.—No noticeable effects.

17,000 lbs.—Headers crack slightly.

No effects on the metal.

20,000 lbs.—Increase in header cracks. Beam settling into the hangers. Slight bulge in the hangers at the bottom of the beam.

25,000 lbs.—Metal at the bottom bulging on account of the beam settling into it.

Continued cracking of headers and starting of prongs to straighten on one end.

35,000 lbs.—Cracking of the headers on the top and outside, causing the beginning of the straightening of the prongs.

Bottoms of the hangers bellied quite considerably.

38,000 lbs.—Maximum load during failure.

DEPARTMENT OF APPLIED MECHANICS AND HYDRAULICS
CASE SCHOOL OF APPLIED SCIENCE
CLEVELAND, OHIO

TEST No. 6

No. 1 HANGERS, 8 x 10 PINE BEAM.

6 x 12 x 12 PINE HEADERS. TESTED AUGUST 8, 1913

TESTED AT ONE END.

HANGER MADE OF ANGLE IRON, $3\frac{1}{2}$ x 2 x $\frac{5}{16}$, FAST-
ENED TO HEADERS BY $\frac{3}{8}$ x 2 IN. LAG BOLTS

WITNESSED BY MR. SMITH OF THE VAN DORN
IRON WORKS COMPANY

Attachment to headers and beam perfect. See Fig. 5 for
arrangement for test.

Notes on the Loading:

- 6,000 lbs.—No effects.
- 10,000 lbs.—No effects.
- 16,000 lbs.—No effects.
- 20,000 lbs.—No effects.
- 25,000 lbs.—Slight curving of the bottom of the hanger
and settling of the beam.
- 30,000 lbs.—Bottom of the hanger leaving the header
due to the support remaining stationary
while the end of the beam in the hanger
moves down under the load.
- 36,000 lbs.—Maximum load. Header fails by compres-
sion on the inner side and cracking on the
outside. Beam unaffected. Slight bulging
of the bottom of the hangers.

DEPARTMENT OF APPLIED MECHANICS AND HYDRAULICS
CASE SCHOOL OF APPLIED SCIENCE
CLEVELAND, OHIO

TEST No. 7

No. 1 HANGERS, 12 x 12 PINE BEAM.

6 x 14 x 18 PINE HEADERS. TESTED AUGUST 8, 1913

HANGER MADE OF ANGLE IRON, $3\frac{1}{2}$ x 2 x $\frac{5}{16}$, FAST-
ENED TO HEADERS BY $\frac{3}{8}$ x 2 INCH LAG SCREWS

WITNESSED BY MR. SMITH OF THE VAN DORN
IRON WORKS COMPANY

Attachment to headers and beam perfect. See Fig. 5 for
arrangement for test.

Notes on the Loading:

On account of the size of the blocks, could not test this
hanger properly and as set in machine, header tilted on
inner edge and lag screws pulled out at a load of 18,000
lbs.

TEST No. 8

No. 1 HANGER, 6 x 10 PINE BEAM.

6 x 12 x 12 PINE HEADERS. TESTED AUGUST 7, 1913

WITNESSED BY MR. SMITH OF THE VAN DORN
IRON WORKS COMPANY

Attachment to headers and beam perfect. See Fig. 4 for
arrangement for test.

Notes on the Loading:

12,000 lbs.—No apparent effect.

15,000 lbs.—Metal settling into wood slightly.

20,000 lbs.—Metal settling into wood slightly more.

25,000 lbs.—Wood starting to crush, causing belly in
bottom of the hangers. Top of the hanger
raised about $\frac{1}{32}$ inch.

44,000 lbs.—Complete failure of the wood. Hanger fails
by the straightening of the prongs.

DEPARTMENT OF APPLIED MECHANICS AND HYDRAULICS
CASE SCHOOL OF APPLIED SCIENCE
CLEVELAND, OHIO

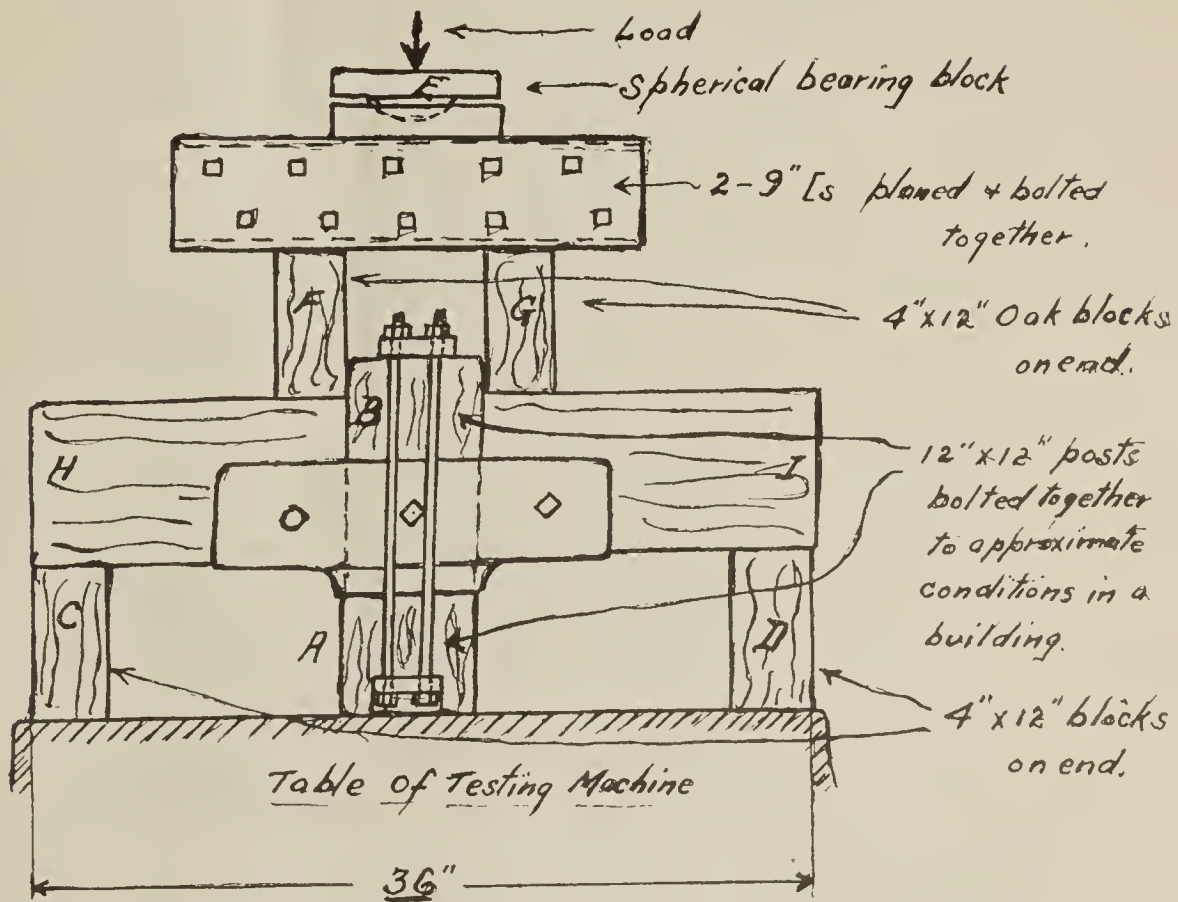
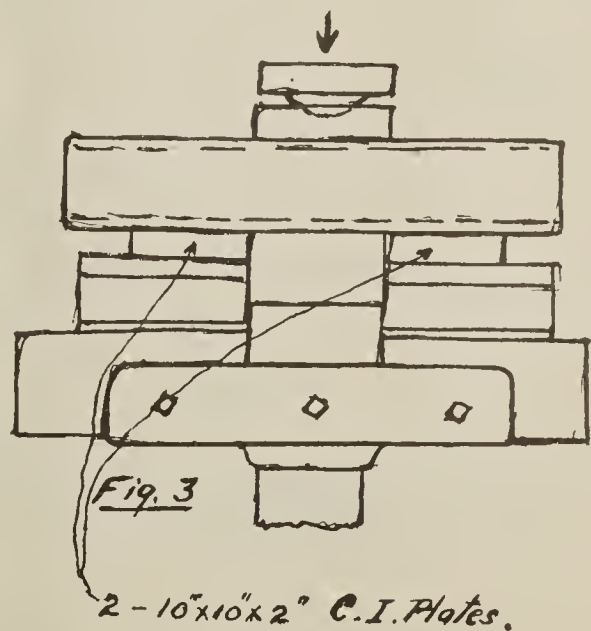
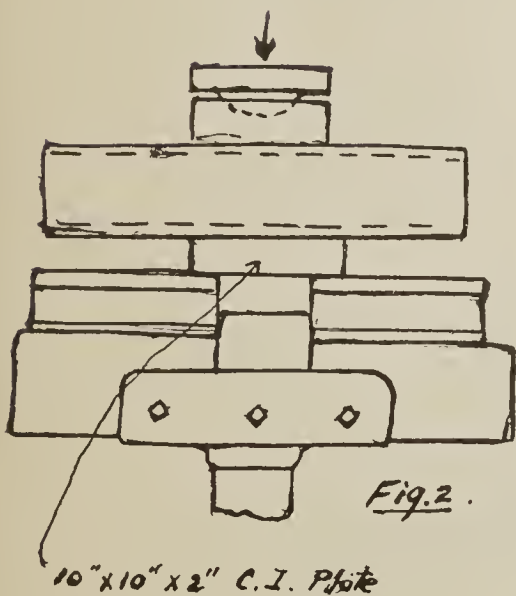


Fig. 1 - Free-hand sketch - not to scale.



DEPARTMENT OF APPLIED MECHANICS AND HYDRAULICS
CASE SCHOOL OF APPLIED SCIENCE
CLEVELAND, OHIO

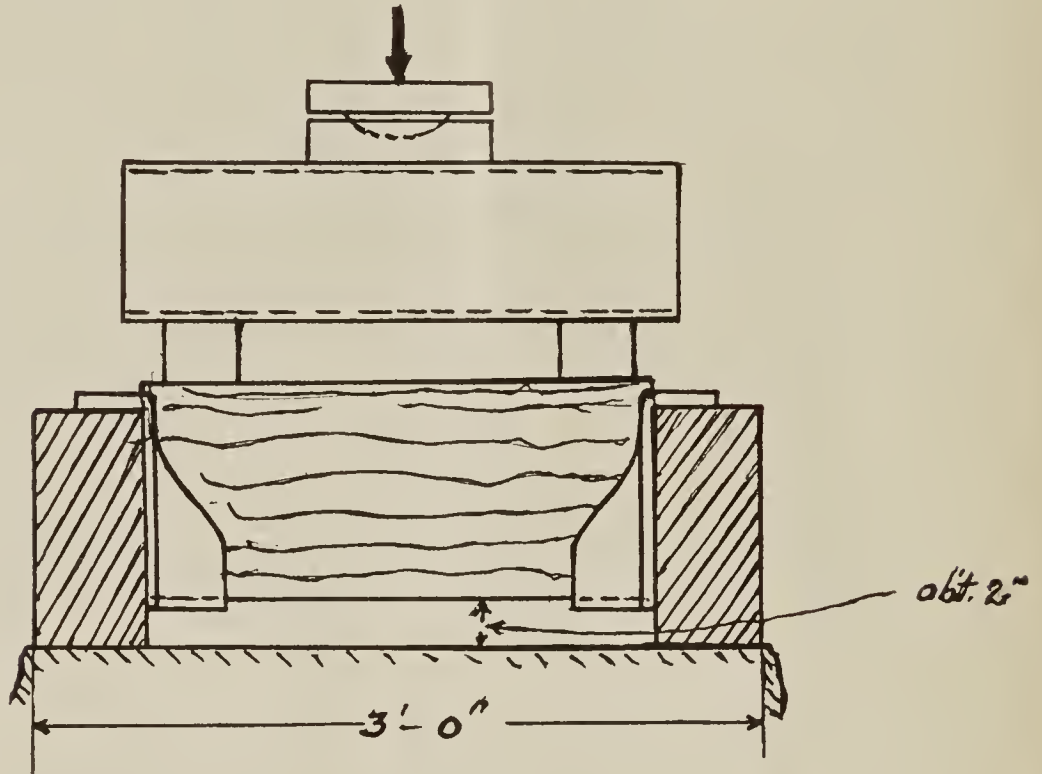


Fig. 4.

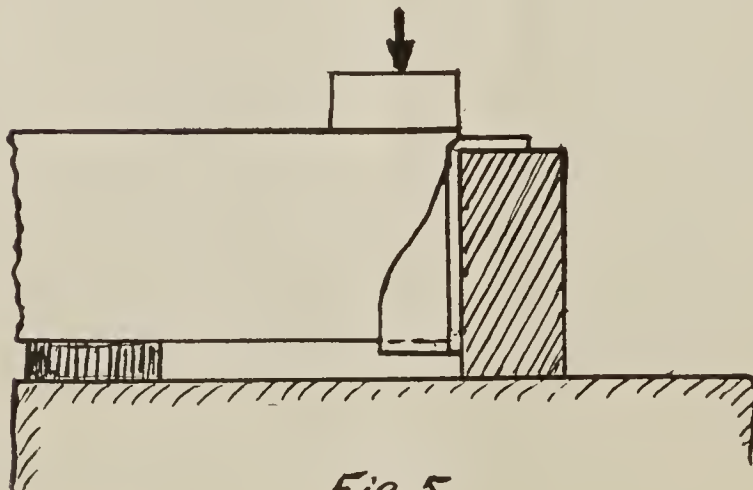


Fig. 5.

REPORT OF TESTS MADE ON WROUGHT STEEL

Used in the Manufacture of
THE VAN DORN JOIST HANGER

TEST No. 1

Specimen cut from blank used for Light Hanger:

Elastic limit per square inch.....42,230

Ultimate strength per square inch.....60,480

Stretch in 8 inch = 2.28 inch = 28.5 per cent.

Silky fracture.

TEST No. 2

Specimen cut from same blank as the one used in Test No. 1:

Elastic limit per square inch.....44,300

Ultimate strength per square inch.....61,900

Stretch in 8 inch = 2.22 inch = 27.75 per cent.

Silky fracture.

TEST No. 3

Specimen cut from blank used for Medium Hanger:

Elastic limit per square inch.....46,090

Ultimate strength per square inch.....63,900

Stretch in 8 inch = 2.16 inch = 27.0 per cent.

Silky fracture.

TEST No. 4

Specimen cut from same blank as the one used in Test No. 3:

Elastic limit per square inch.....46,990

Ultimate strength per square inch.....64,320

Stretch in 8 inch = 2.14 inch = 26.75 per cent.

Silky fracture.

TEST No. 5

Specimen cut from blank used for Heavy Hanger:

Elastic limit per square inch.....43,880

Ultimate strength per square inch.....63,280

Stretch in 8 inch = 2.02 inch = 25.25 per cent.

Silky fracture.

TEST No. 6

Specimen cut from same blank as the one used in Test No. 5:

Elastic limit per square inch.....44,120

Ultimate strength per square inch.....63,610

Stretch in 8 inch = 1.92 inch = 24.0 per cent.

Silky fracture.

The specimens for the above described tests were selected at random from the piles of stock and were prepared and tested under our supervision. The results indicate a very good quality of uniformly soft, ductile steel.

(Signed) THE OSBORN ENGINEERING CO.

By W. O. Henderer, Assistant Engineer.

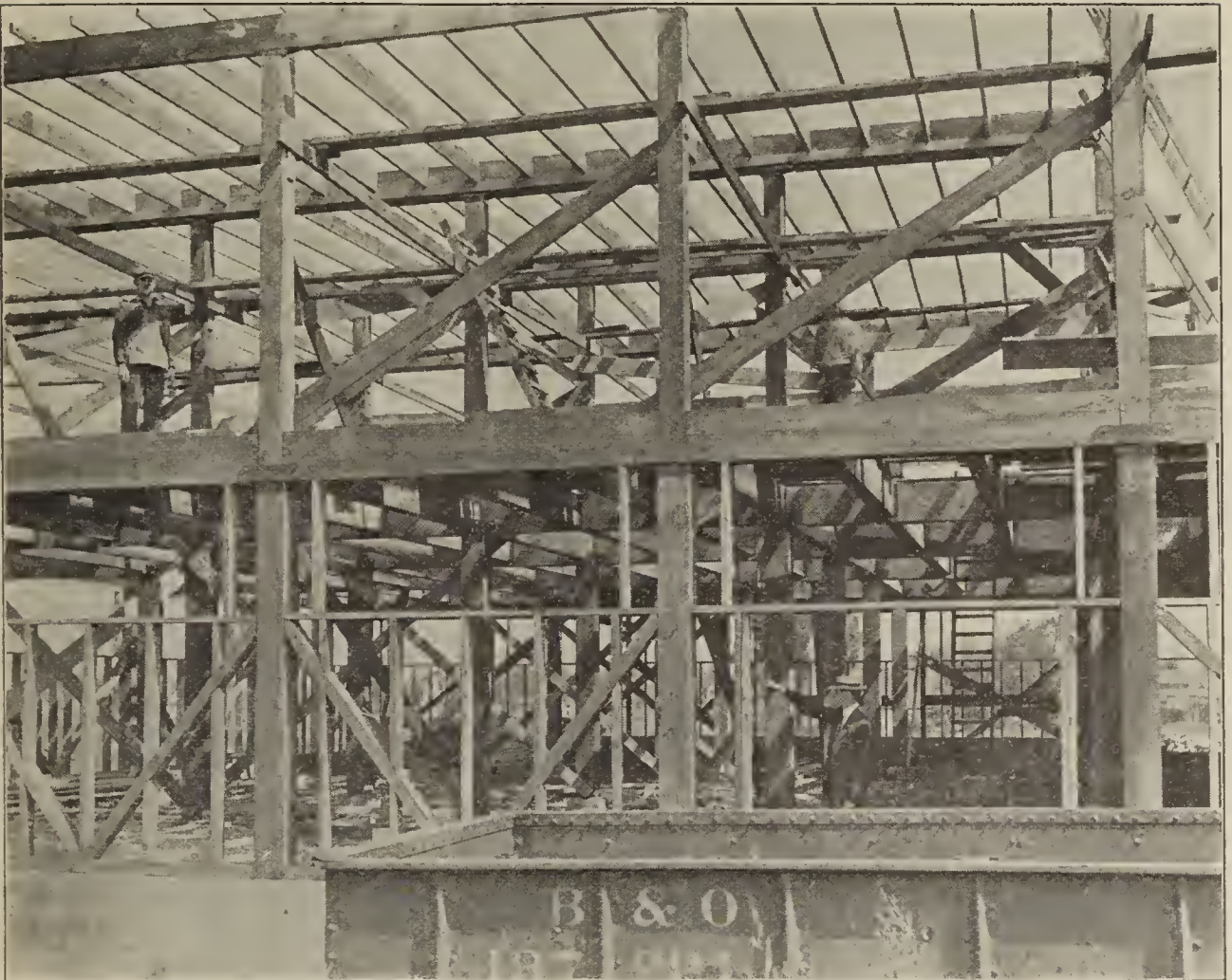


In this test 3 x 14 inch oak joists, 11 feet long, were used, suspended in Van Dorn Medium Hangers, which were fastened to oak headers. These joists were loaded with 50,000 lbs. of pig iron, **without the least observable effect on the hangers.** On account of the unstable state of the pile of pig iron it was not deemed safe to continue loading, although the joists, hangers and headers would apparently sustain a much greater load. The load of 50,000 lbs. corresponds to a load of about 1,709 lbs. per square foot on joists spaced 16-inch centers.

(Signed) THE OSBORN ENGINEERING CO.,
By W. O. Henderer, Assistant Engineer.

The above test is one of many made by the Osborn Engineering Co. and has been shown in various catalogues issued by this Department from time to time. We are desirous of incorporating it in our catalogue again for the reason that many Architects, Contractors and Builders believe it to be more parallel as to the actual working conditions in mill constructed buildings. We therefore submit it for your approval, and desire that you satisfy yourselves as to whether it was or was not a gratifying test.

PHOTO SHOWING JOIST HANGERS AND POST CAPS
IN PLACE



The above cut shows a view of one end of a large warehouse building erected in our city.

Our make of Joist Hangers, Post Caps and Bases were specified by a leading architect and the material was used by one of the largest contractors in the city.

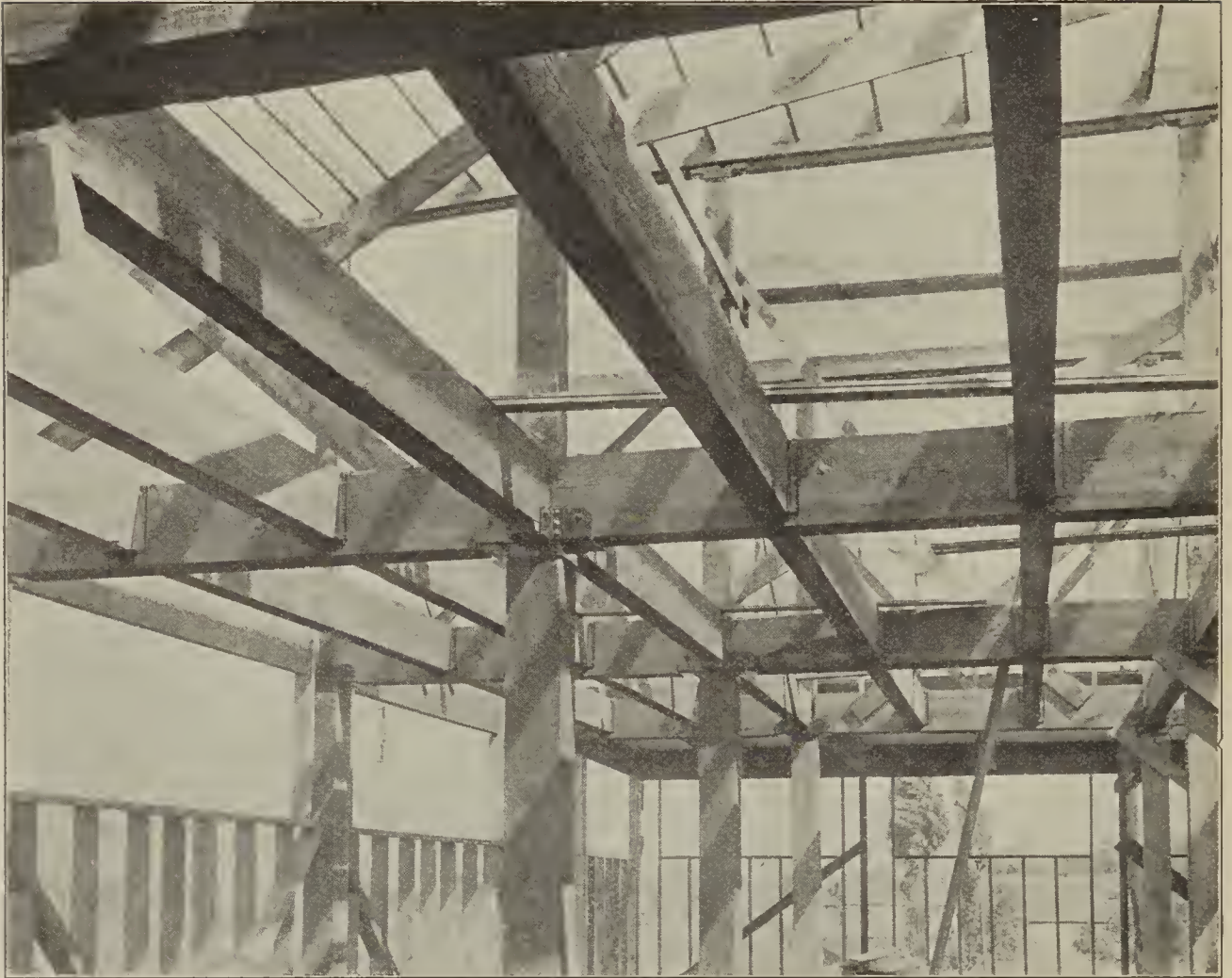
Both the Architect and Contractor are familiar with our goods, having specified and used same for several years, and are aware of the great saving by doing so.

On next page we show a better view of the Hangers and Post Caps in place.

Observe how the full strength of header and joist is preserved, as no mortising is done.

All sizes of Post Caps, Bases and Joist Hangers shown in this catalogue are stocked.

Can manufacture any size and shape. Write for miniature Hanger.



This cut shows a portion of same building as on preceding page, but brings the lines of Hangers and Post Caps in question out to better advantage.

The progressive architects are invariably of the same opinion, that is: Joist Hangers, Post Caps and Bases are the practical material to be employed in mill constructed buildings.

Our claim for our material is that it is stronger, more easily applied, and considering all phases, cheaper than any other manufactured, and we ask the recipient of this catalog to arrive at his own conclusion after reviewing these pages.

If further information is desired, please command us.

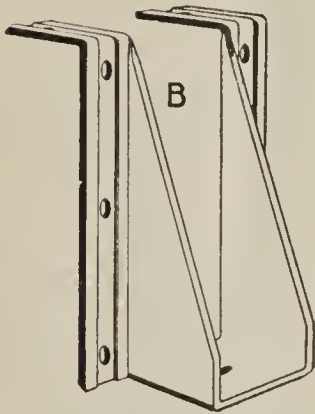


Fig. 1

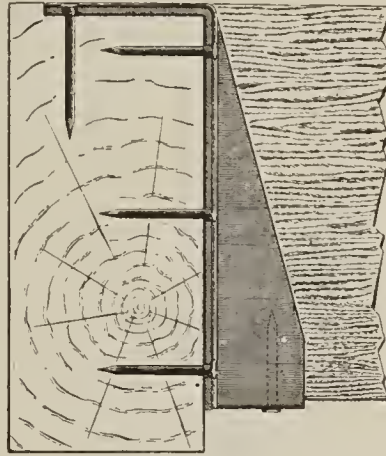


Fig. 2

No. 1, or Our Regular Hanger

The steel which is employed in the manufacture of our Joist Hangers is the best obtainable. We own the rolls on which these bars are made and each and every bar is subject to both our surface and analysis inspection. Therefore, there is no question as to the tensile strength. The construction of the hanger bar is such that we obtain the best results that can be obtained from any section made into a hanger, and therefore shows superior construction over all other designs.

You will note by observing illustration No. 1 that the side flanges of the Hanger are wrought with a groove and ridge. The ridges serve as additional strength and especially at the angle of the prong where the severe strain comes.

The groove of the Hanger allows the spike head to come into a level with the ridge, therefore giving an attractive appearance.

If the Joist Hanger is applied in the proper manner and with spikes as heretofore mentioned, there is no denying the assertion that the spikes themselves have a great carrying capacity.

The spikes also serve the purpose of holding the joist and the headers together thoroughly, so that any season cracks will not affect the strength.

This Hanger is more easily applied than any other on the market and building construction is simplified with its use. All that is necessary to do is to square the ends of the joist so that they fit snugly against the header, thereby giving the hanger additional purchase.

Joist Hangers are advantageously used in mill constructed buildings, also in framing around stairways, headers, around chimneys and all joist connections, whether they be to brick wall, wood headers, cement blocks or iron girders. These different styles of Hangers are shown in the various illustrations in this catalogue.

For list prices, see page 20.

The Best and Most Widely Known Hanger in New England

THE VAN DORN IRON WORKS CO.
JOIST HANGER DEPT.
CLEVELAND,
OHIO

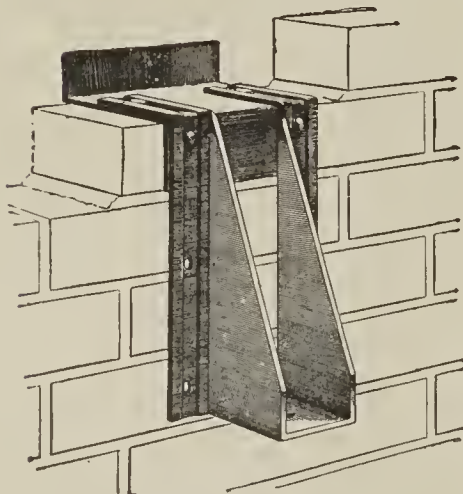


Fig. 3



Figs. 1 and 4 riveted
together forms the com-
plete No. 4 Wall Hanger.

Fig. 4

No. 4, or Wall Hanger

In the manufacture of our Wall Hanger as above shown, we use our regular or No. 1 Hanger with the plate, as shown in Fig. 3. This plate is riveted to the Hanger with one rivet on each side and one on each prong. This makes the Hanger very rigid across the upper angle and lays in the brick wall without breaking the joint.

The plate of the Hanger extends into the wall 4 in. or one course of brick, excepting when the joist to be supported is 8 in. or over in width and in that case the plate is made to extend into the wall 8 in. This gives ample bearing for the Hanger and eliminates the danger of crushing the edge of the brick.

One of the most valuable and important uses of the Wall Hanger is in connection with partitions or outside walls. The plate as turned up at the back not only serves as an anchorage to the brick wall and thereby holding the walls together, but in case of fire when the interior is burned out, it leaves the walls impact without bulging and the joist can be replaced without changing the Hanger. The advantage of this feature is appreciated by Architects who recognize in it the insurance rates on buildings.

We do not carry a complete stock of the Wall Hangers but we have facilities for getting these Hangers out promptly.

In ordering, all that is necessary is to give us the size of the joist which is to be supported, as is the case with our regular or No. 1 Hanger, for as stated above, the width of the Hanger governs the depth of the plate and our standards cover that feature

For list prices, see page 21.

The Best and Most Widely Known Hanger in New England

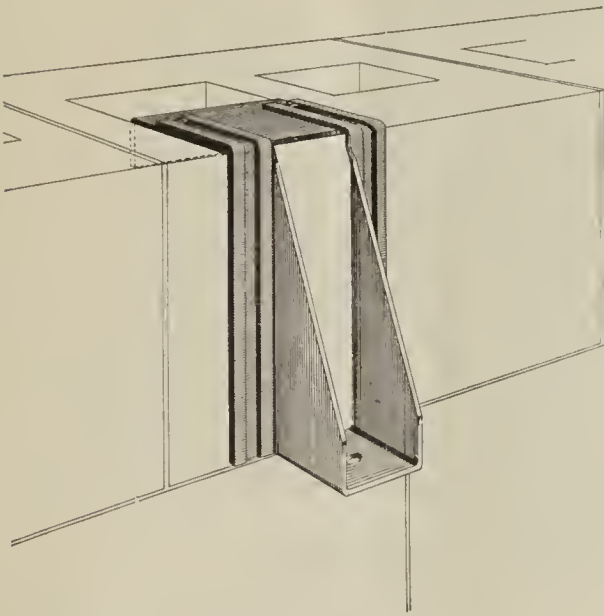
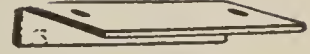


Fig. 5



This plate riveted to regular Hanger No. 1 forms the complete hanger No. 5 for concrete blocks.

Fig. 6

No. 5, or Cement Block Hanger

The Van Dorn Hanger is the most adaptable hanger for concrete block construction. As shown in above illustration, the same Hanger employed on the wood header is used for the concrete block with the additional plate riveted on as shown, being similar to our Hanger for brick, except that the back flange of the plate is turned down.

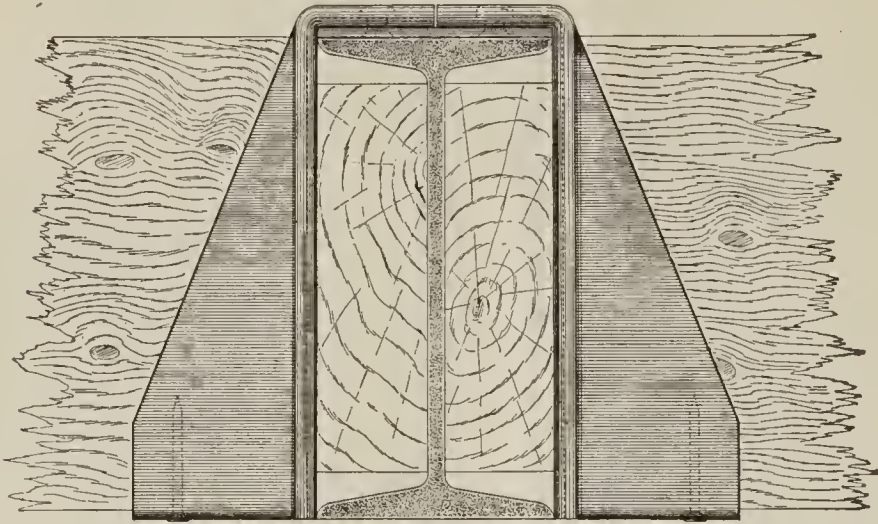
The riveted plate makes the strongest possible Hanger for this purpose and gives a large bearing surface on the concrete block, thus distributing the weight imposed on the Hanger and eliminating the danger of crushing the corners of the concrete block.

When ordering these Hangers it will be necessary to state the thickness of the outside shell of the block, for as shown in the sketch, the back flange of the plate which is riveted to the Hanger is turned down and should be made to fit snugly over the shell.

We carry some sizes of this style Hanger in stock but not a complete list. We cannot, for the reason that practically no two orders are the same, that is, the thickness of the shell over which the Hanger goes is not the same and the plate, as stated above, is to be made accordingly.

The list price of this Hanger is the same as the list price of the Wall Hanger shown on page 21.

The Best and Most Widely Known Hanger in New England



No. 6, or Double Hanger

The above shows what we have designated as our double or No. 6 Hanger and which is made by using two of our regular or No. 1 Hangers and riveting them together with steel straps.

When figuring the price on the above Hanger calculate it as two regular Hangers, using the list price as shown on page 20 and adding 15 cents net for the steel strap connections when the girder over which the Hanger goes is 7 in. across or under, and 25 cents net when the girder over which the Hanger goes is wider than 7 in. across.

When ordering this Hanger it will be necessary for you to state the size and width of beam over which the Hanger goes or the exact measurement of the flange of the beam, providing the Hanger goes over a steel I Beam.

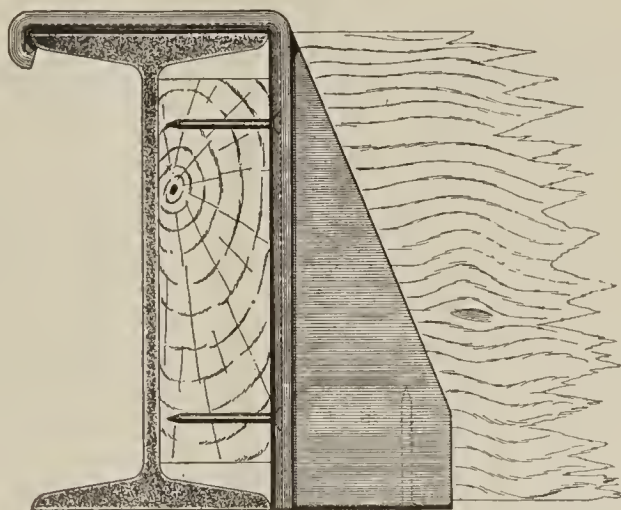
When it is used on a wood girder it is only necessary for you to give us the width of the same. In this connection, as a suggestion would state, that it is not absolutely necessary to use the Double Hanger over wood girders, although it is preferable.

Two regular Hangers can be spiked to the girder opposite each other with practically the same results, thereby eliminating the extra charge which we are compelled to make for the strap connections.

Owing to the various widths of the girders over which these Hangers go, it is impossible for us to keep a complete stock of all sizes on hand. We do, however, carry some sizes and in case we do not have on hand the size that you order, would state, that we have the necessary machinery and electric welders to rush these orders through.

When ordering, as stated above, it will be necessary for you to give us the measurement of the flange of the I Beam or the width of the Girder, otherwise the order will be delayed until we can obtain from you the required dimension.

The Best and Most Widely Known Hanger in New England



No. 7, or I Beam Hanger

We manufacture, as shown above, a special Hanger known as our No. 7 and which is made to connect to a steel I Beam girder. This Hanger, as are all of our other styles, is manufactured by using our regular No. 1 Hanger and riveting to it a steel plate formed to fit over the flange of the Beam, as shown above.

When ordering it will be necessary for you to state the size and weight of the beam over which the Hanger goes or the measurement of the top flange.

The above cut shows a wood block placed between the Hanger and the Beam, but this is not absolutely necessary as the Hanger is made to the exact size. They are applied with little or no labor and is one of the strongest features of this Hanger, as well as the other styles that we manufacture.

As is the case with our No. 6 Hanger, owing to the different sizes and width of the Beams over which the Hangers go, we are not able to keep a complete stock. However, we do carry in stock many sizes and have special equipment for the production of this style of Hanger, very promptly. We carry a complete stock of the regular Hangers and the only delay therefore in the manufacture of this style is in riveting the plate to the Hanger which does not consume much time, with our modern facilities.

For list prices, see page 21.

The Best and Most Widely Known Hanger in New England

LIST PRICE
of
VAN DORN JOIST HANGERS No. 1

See Cut Page 14

				Weight						Weight	
				List	Each					List	Each
				Price	lbs. oz.					Price	lbs. oz.
2 x 6 inch Joist.....				\$0.26	2 8	2½ x 6 inch Joist...				\$0.45	3 0
2 x 8 " " .....				.28	2 13	2½ x 8 " " ...				.46	3 5
2 x 10 " " .....				.30	3 8	2½ x 10 " " ...				.47	4 0
2 x 12 " " .....				.32	4 3	2½ x 12 " " ...				.48	4 11
2 x 14 " " .....				.40	5 0	2½ x 14 " " ...				.50	5 8
2 x 16 " " .....				.42	5 12	2½ x 16 " " ...				.56	6 4
2 x 18 " " .....				.46	6 12	2½ x 18 " " ...				.60	7 4
3 x 6 " " .....				.30	2 10	4 x 6 " " ...				.35	3 8
3 x 8 " " .....				.32	3 9	4 x 8 " " ...				.36	4 12
3 x 10 " " .....				.34	4 4	4 x 10 " " ...				.40	5 10
3 x 12 " " .....				.36	5 0	4 x 12 " " ...				.46	6 13
3 x 14 " " .....				.40	5 10	4 x 14 " " ...				.50	7 10
3 x 16 " " .....				.44	6 4	4 x 16 " " ...				.52	8 8
3 x 18 " " .....				.50	7 0	4 x 18 " " ...				.56	10 0
5 x 8 " " .....				.70	7 0	6 x 6 " " ...				.40	7 10
5 x 10 " " .....				.75	8 0	6 x 8 " " ...				.50	8 0
5 x 12 " " .....				.80	9 0	6 x 10 " " ...				.52	8 12
5 x 14 " " .....				.85	9 12	6 x 12 " " ...				.58	9 8
5 x 16 " " .....				.90	10 8	6 x 14 " " ...				.64	10 4
5 x 18 " "				1.00	12 0	6 x 16 " " ...				.68	11 0
8 x 8 " " .....				.88	10 0	6 x 18 " " .....				.72	12 8
8 x 10 " " .....				.90	11 0	10 x 6 " " ...				.40	7 10
8 x 12 " "				1.02	11 14	10 x 8 " " ...				.50	8 0
8 x 14 " "				1.11	12 3	10 x 10 " " ...				.95	11 0
8 x 16 " "				1.18	13 0	10 x 12 " " ...				1.02	12 0
8 x 18 " "				1.25	14 0	10 x 14 " " ...				1.18	13 8
12 x 12 " "				1.40	14 0	10 x 16 " " ...				1.20	15 2
12 x 14 " "				1.50	15 0	10 x 18 " " ...				1.30	17 0
12 x 16 " "				1.60	15 12	14 x 6 " " ...				1.80	17 0
12 x 18 " "				1.70	17 0	14 x 14 " " ...				1.95	19 0

LIST PRICE
of
VAN DORN JOIST HANGERS Nos. 4, 5 and 7

	List Price	Weight Each lbs. oz.		List Price	Weight Each lbs. oz.
2 x 6 inch Joist.....	\$0.43	4 0	2½ x 6 inch Joist...	\$0.62	4 8
2 x 8 " " .....	.45	4 5	2½ x 8 " " ...	.63	4 13
2 x 10 " " .....	.47	5 0	2½ x 10 " " ...	.64	5 8
2 x 12 " " .....	.49	5 11	2½ x 12 " " ...	.65	6 3
2 x 14 " " .....	.57	6 8	2½ x 14 " " ...	.67	7 0
2 x 16 " " .....	.59	7 4	2½ x 16 " " ...	.73	7 12
2 x 18 " " .....	.67	8 4	2½ x 18 " " ...	.77	8 12
3 x 6 " " .....	.50	4 6	4 x 6 " " ...	.60	5 8
3 x 8 " " .....	.52	5 5	4 x 8 " " ...	.62	6 12
3 x 10 " " .....	.54	6 0	4 x 10 " " ...	.65	7 10
3 x 12 " " .....	.56	6 12	4 x 12 " " ...	.71	8 13
3 x 14 " " .....	.60	7 6	4 x 14 " " ...	.75	9 10
3 x 16 " " .....	.64	8 0	4 x 16 " " ...	.83	10 8
3 x 18 " " .....	.70	8 12	4 x 18 " " ...	.91	12 0
5 x 8 " "	1.10	12 8	6 x 6 " " ...	.90	14 0
5 x 10 " "	1.15	13 8	6 x 8 " " ...	1.00	14 0
5 x 12 " "	1.20	14 8	6 x 10 " " ...	1.02	14 12
5 x 14 " "	1.25	15 4	6 x 12 " " ...	1.08	15 8
5 x 16 " "	1.30	16 0	6 x 14 " " ...	1.14	16 4
5 x 18 " "	1.40	17 8	6 x 16 " " ...	1.18	17 0
8 x 8 " "	1.56	17 4	6 x 18 " " ...	1.24	18 8
8 x 10 " "	1.58	18 4	10 x 10 " " ...	1.95	23 8
8 x 12 " "	1.69	19 2	10 x 12 " " ...	2.01	24 8
8 x 14 " "	1.79	19 7	10 x 14 " " ...	2.16	26 0
8 x 16 " "	1.86	20 4	10 x 16 " " ...	2.18	27 10
8 x 18 " "	1.93	21 4	10 x 18 " " ...	2.25	29 8
12 x 12 " "	2.60	28 4	14 x 14 " " ...	3.15	33 0
12 x 14 " "	2.70	29 4	14 x 16 " " ...	3.30	35 0
12 x 16 " "	2.80	30 0	14 x 18 " " ...	3.95	37 0
12 x 18 " "	2.90	31 4			

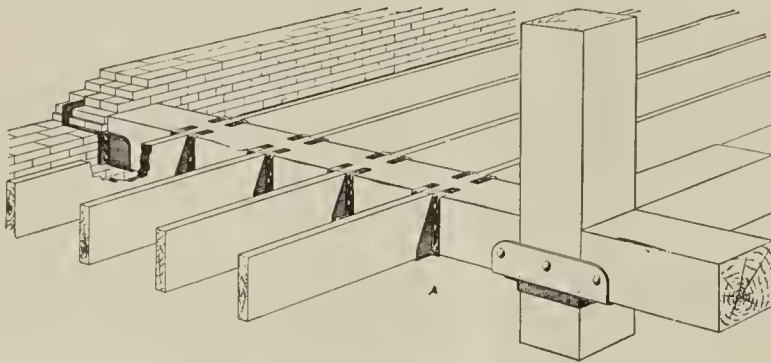
The extra for special sizes is the same as for regular size as noted on page 20.

VAN DORN DOUBLE OR No. 6 HANGER

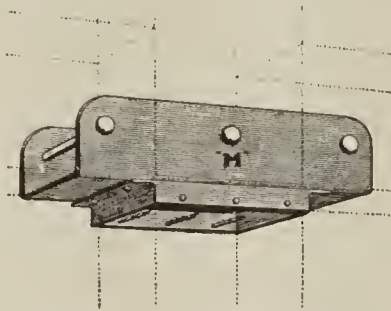
When figuring the double Hanger, calculate it as two single hangers, adding 15 cents net for the steel strap connections when flange of beam or the girder is seven inches or under across, and 25 cents net when girder is more than seven inches across.

The Best and Most Widely Known Hanger in New England

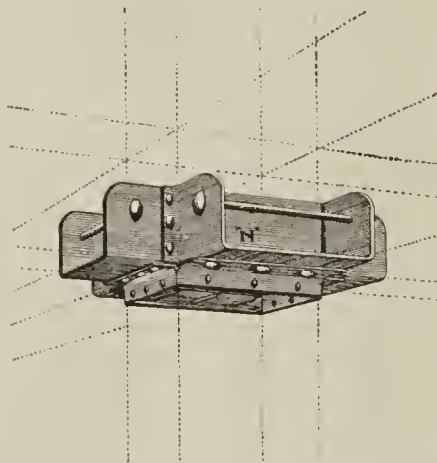
VAN DORN STEEL POST CAPS AND BASES



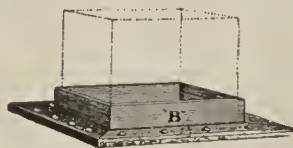
Plan of Framing, showing Regular Hangers, Wall Hangers
and Three-way Post Cap



Two-way Post Cap



Four-way Post Cap



Post Base

The above shows plan of framing, using the Van Dorn Joist Hangers, Post Caps and Bases. Easily applied and forming a very rigid construction.

Bolts included in cost of Post Caps.

Any style or size made to order.

See list prices, page 23.

LIST PRICES
of
REGULAR SIZES OF
VAN DORN STEEL POST CAPS AND BASES

TWO-WAY POST CAP

	Price List	Weight Each
6 x 6 inch Posts and 6 inch wide Girders.....	\$2.85	35 lbs.
8 x 8 " " " 8 " " " "	3.15	43 "
10 x 10 " " " 10 " " " "	3.85	60 "
12 x 12 " " " 12 " " " "	4.35	72 "
14 x 14 " " " 14 " " " "	5.00	85 "
16 x 16 " " " 16 " " " "	5.75	100 "
18 x 18 " " " 18 " " " "	7.00	115 "

THREE-WAY POST CAP

6 x 6 inch Posts and 6 inch wide Girders.....	\$3.65	48 lbs.
8 x 8 " " " 8 " " " "	4.00	60 "
10 x 10 " " " 10 " " " "	4.85	78 "
12 x 12 " " " 12 " " " "	5.50	95 "
14 x 14 " " " 14 " " " "	6.25	110 "
16 x 16 " " " 16 " " " "	7.25	125 "
18 x 18 " " " 18 " " " "	8.75	140 "

FOUR-WAY POST CAP

6 x 6 inch Posts and 6 inch wide Girders.....	\$4.35	61 lbs.
8 x 8 " " " 8 " " " "	4.75	77 "
10 x 10 " " " 10 " " " "	5.80	96 "
12 x 12 " " " 12 " " " "	6.55	118 "
14 x 14 " " " 14 " " " "	7.50	135 "
16 x 16 " " " 16 " " " "	8.65	150 "
18 x 18 " " " 18 " " " "	10.50	165 "

POST BASES

6 x 6 inch Posts.....	\$1.30	17 lbs.
8 x 8 " "	1.50	26 "
10 x 10 " "	1.80	34 "
12 x 12 " "	2.30	42 "
14 x 14 " "	2.90	50 "
16 x 16 " "	3.45	60 "
18 x 18 " "	4.15	70 "

We only stock sizes with size of post and girder the same. However, we can make any size required.

Caps are special when girders are different widths than posts or vice versa, and in figuring them the largest width measurement, whether it be posts or girder, will govern the price.

FOR INSTANCE

In figuring a two-way cap, 12 x 12 in. lower post, 10 in. main girder and 12 x 12 in. upper post, the list price would be \$4.35 each, for the main part of the cap has to be made large enough for the 12 in. upper post. If the upper post is only 10 x 10 in. the list price would be \$3.85.

All necessary bolts included.

The Best and Most Widely Known Hanger in New England

TELEGRAPHIC CODE

Customers finding themselves in immediate need of Steel Hangers, Post Caps and Bases, and wishing to send the order in by telegraph, will save considerable telegraphic charges in observing the Code given below.

See preceding pages for cuts of different styles. Send confirmation of telegram.

Use the following in giving quantities of Hangers, Post Caps and Bases wanted:

1.....	Accent	52.....	Alcove
2.....	Acclaim	53.....	Alert
3.....	Accord	54.....	Alight
4.....	Acquaint	55.....	Allay
5.....	Acquit	56.....	Alliance
6.....	Acting	57.....	Allot
7.....	Acute	58.....	Allotting
8.....	Adage	59.....	Allude
9.....	Adair	60.....	Alluding
10.....	Adam	61.....	Almanac
11.....	Adamant	62.....	Almond
12.....	Adder	63.....	Alms
13.....	Addling	64.....	Aloof
14.....	Adept	65.....	Aloud
15.....	Adjourn	66.....	Alpine
16.....	Adjunct	67.....	Altar
17.....	Adjure	68.....	Alton
18.....	Adjust	69.....	Alum
19.....	Admiral	70.....	Amass
20.....	Admire	71.....	Amber
21.....	Admix	72.....	Ambush
22.....	Adore	73.....	Amend
23.....	Adorning	74.....	Amid
24.....	Adrift	75.....	Amidst
25.....	Adult	76.....	Amity
26.....	Advent	77.....	Amour
27.....	Adverb	78.....	Amourous
28.....	Afar	79.....	Amusing
29.....	Affable	80.....	Anagram
30.....	Affair	81.....	Anchor
31.....	Affect	82.....	Angel
32.....	Affiance	83.....	Angling
33.....	Affiant	84.....	Anguish
34.....	Affirm	85.....	Angular
35.....	Afflict	86.....	Animal
36.....	Afford	87.....	Anneal
37.....	Affray	88.....	Annex
38.....	Affright	89.....	Animate
39.....	Affront	90.....	Ankle
40.....	Afoot	91.....	Announce
41.....	Afresh	92.....	Annoy
42.....	Agate	93.....	Annual
43.....	Aged	94.....	Anoint
44.....	Aghast	95.....	Anon
45.....	Agility	96.....	Anthem
46.....	Agony	97.....	Antic
47.....	Aground	98.....	Anthony
48.....	Akin	99.....	Antler
49.....	Alarm	100.....	Anvil
50.....	Albert	101.....	Apace
51.....	Album	102.....	Apart

TELEGRAPHIC CODE—Continued

103.....	Badge	166.....	Cannon
104.....	Bail	167.....	Cane
105.....	Ballet	168.....	Cape
106.....	Banana	169.....	Car
107.....	Bait	170.....	Card
108.....	Balloon	171.....	Carbon
109.....	Bamboo	172.....	Cargo
110.....	Bank	173.....	Carol
111.....	Banquet	174.....	Carrot
112.....	Bantam	175.....	Cart
113.....	Barrel	176.....	Case
114.....	Basket	177.....	Carve
115.....	Basin	178.....	Caster
116.....	Basis	179.....	Cavern
117.....	Bargain	180.....	Cell
118.....	Bay	181.....	Cement
119.....	Bayonet	182.....	Cereal
120.....	Bazaar	183.....	Chasm
121.....	Bawl	184.....	Charm
122.....	Beach	185.....	Chart
123.....	Beam	186.....	Celt
124.....	Beard	187.....	Centre
125.....	Beaver	188.....	Check
126.....	Beggar	189.....	Cheer
127.....	Bell	190.....	Choir
128.....	Beckon	191.....	Chord
129.....	Berry	192.....	Church
130.....	Bench	193.....	Circle
131.....	Billion	194.....	Citron
132.....	Bird	195.....	Cliff
133.....	Biscuit	196.....	Clime
134.....	Block	197.....	Clew
135.....	Boat	198.....	Clerk
136.....	Bond	199.....	Cloak
137.....	Bobbin	200.....	Clown
138.....	Bison	201.....	Coin
139.....	Bonnet	202.....	Cocoa
140.....	Bridge	203.....	Collar
141.....	Bronze	204.....	Coil
142.....	Brook	205.....	Comedy
143.....	Broom	206.....	Coke
144.....	Brown	207.....	Cook
145.....	Brogue	208.....	Corn
146.....	Bullet	209.....	Dahlia
147.....	Button	210.....	Daisy
148.....	Bushel	211.....	Dale
149.....	Burden	212.....	Dandy
150.....	Buckle	213.....	Data
151.....	Buoy	214.....	Dawn
152.....	Business	215.....	Decade
153.....	Bulrush	216.....	Deck
154.....	Bulk	217.....	Deed
155.....	Cabin	218.....	Deer
156.....	Cable	219.....	Dentist
157.....	Cage	220.....	Desert
158.....	Calico	221.....	Design
159.....	Cadet	222.....	Dial
160.....	Camel	223.....	Diary
161.....	Cameo	224.....	Dish
162.....	Camp	225.....	Divan
163.....	Canal	226.....	Dome
164.....	Canary	227.....	Dock
165.....	Candle	228.....	Doom

TELEGRAPHIC CODE—Continued

229.....	Donkey	292.....	Lady
230.....	Draft	293.....	Lake
231.....	Drake	294.....	Lane
232.....	Drama	295.....	Land
233.....	Dream	296.....	Lash
234.....	Duke	297.....	Lass
235.....	Fable	298.....	Lark
236.....	Fabric	299.....	Leak
237.....	Face	300.....	Ledge
238.....	Fact	310.....	Lemon
239.....	Fade	320.....	Leaf
240.....	Fair	330.....	Lead
241.....	Faith	340.....	Letter
242.....	Fame	350.....	Levee
243.....	Fate	360.....	Lily
244.....	Father	370.....	Lilac
245.....	Fawn	380.....	Local
246.....	Feast	390.....	Lock
247.....	Fee	400.....	Loft
248.....	Fern	410.....	Luck
249.....	Fence	420.....	Lumber
250.....	Ferry	430.....	Lung
251.....	Field	440.....	Magic
252.....	Figure	450.....	Mail
253.....	Firm	460.....	Maid
254.....	Fire	470.....	Major
255.....	Flag	480.....	Mault
256.....	Flame	490.....	Mane
257.....	Flat	500.....	Mango
258.....	Flash	550.....	Manor
259.....	Flower	600.....	Mantel
260.....	Floor	650.....	Maple
261.....	Gable	700.....	Marvel
262.....	Gage	750.....	Martin
263.....	Gale	800.....	Mate
264.....	Giant	850.....	Mask
265.....	Gipsy	900.....	Mason
266.....	Gold	950.....	Maze
267.....	Glove	1000.....	Meal
268.....	Gloss	1050.....	Medal
269.....	Goblin	1100.....	Mile
270.....	Grain	1150.....	Mind
271.....	Grate	1200.....	Mill
272.....	Gulf	1250.....	Mink
273.....	Guitar	1300.....	Miser
274.....	Gun	1350.....	Mist
275.....	Gross	1400.....	Mite
276.....	Guard	1450.....	Moat
277.....	Gull	1500.....	Mode
278.....	Game	1550.....	Monk
279.....	Grocer	1600.....	Month
280.....	Group	1650.....	Moor
281.....	Groom	1700.....	Mood
282.....	Grotto	1750.....	Moon
283.....	Grape	1800.....	Moral
284.....	Gorilla	1850.....	Moss
285.....	Gong	1900.....	Motar
286.....	Glean	1950.....	Muff
287.....	Label	2000.....	Mule
288.....	Labor	2250.....	Music
289.....	Lace	2500.....	Musk
290.....	Lad	2750.....	Aback
291.....	Laden	3000.....	Abaft

TELEGRAPHIC CODE—Continued

Use the following in designating size of hanger wanted.

In ordering our No. 4 or Wall Hangers, precede the word taken from the list below, designating the size by the word "Nail," otherwise we will interpret that the buyer wishes our No. 1 or Regular Hanger to attach to the wood headers.

It is a trifle difficult to telegraph an order for Nos. 5, 6, or 7 Hangers for the following reason. For No. 5 Hangers we must know thickness of outside shell. For No. 6 Hangers we must know width of girder or flange of beam hanger straddles. For No. 7 Hanger we must know width of flange of beam hanger hooks over.

However, Code can be used for the quantity and size of hanger and the other measurements can be given in regular wording which reduces length of wire to some extent.

Send confirmation of telegraphic order.

2 x 6 inch.....Oak	2½ x 6 inch.....Orange
2 x 8 "Ocean	2½ x 8 "Orator
2 x 10 "Olive	2½ x 10 "Orchard
2 x 12 "Opera	2½ x 12 "Ordeal
2 x 14 "Onion	2½ x 14 "Organ
2 x 16 "Optic	2½ x 16 "Oxford
2 x 18 "Onward	2½ x 18 "Oxyd
3 x 6 inch.....Pack	4 x 6 inch.....Rack
3 x 8 "Page	4 x 8 "Radius
3 x 10 "Pepper	4 x 10 "Rest
3 x 12 "Pigeon	4 x 12 "Rhyme
3 x 14 "Plumb	4 x 14 "Ribbon
3 x 16 "Port	4 x 16 "Road
3 x 18 "Press	4 x 18 "Robbin
5 x 8 inch.....Sable	6 x 8 inch.....Table
5 x 10 "Saint	6 x 10 "Tenor
5 x 12 "Sailor	6 x 12 "Thaw
5 x 14 "Scale	6 x 14 "Thorn
5 x 16 "Seal	6 x 16 "Time
5x 18 "Senate	6 x 18 "Timber
8 x 8 inch.....Tiger	10 x 10 inch.....Vain
8 x 10 "Timid	10 x 12 "Vale
8 x 12 "Tree	10 x 14 "Vault
8 x 14 "Trod	10 x 16 "Veto
8 x 16 "Trust	10 x 18 "Vex
8 x 18 "Truth	

TELEGRAPHIC CODE—Continued

Use Code below in ordering Post Caps and Bases.

For cuts of different styles see page 22.

This Code is for sizes shown only and when the posts and girders are of a different size give same in regular wording. If upper post is larger than girder, please give size of same as well as girder. Send confirmation of your telegram.

TWO-WAY POST CAP, WITH BOLTS

6 x 6 inch Post and	6 inch wide Girders.....	Nancy
8 x 8 " " " 8 " " "	.....	Nation
10 x 10 " " " 10 " " "	.....	Navy
12 x 12 " " " 12 " " "	.....	Neck
14 x 14 " " " 14 " " "	.....	Needle
16 x 16 " " " 16 " " "	.....	Negro
18 x 18 " " " 18 " " "	.....	Night

THREE-WAY POST CAP, WITH BOLTS

6 x 6 inch Post and	6 inch wide Girders.....	Neat
8 x 8 " " " 8 " " "	.....	Noble
10 x 10 " " " 10 " " "	.....	Noise
12 x 12 " " " 12 " " "	.....	Normal
14 x 14 " " " 14 " " "	.....	Norway
16 x 16 " " " 16 " " "	.....	Norwich
18 x 18 " " " 18 " " "	.....	Nostril

FOUR-WAY POST CAP, WITH BOLTS

6 x 6 inch Post and	6 inch wide Girders.....	Nephew
8 x 8 " " " 8 " " "	.....	Notable
10 x 10 " " " 10 " " "	.....	Notary
12 x 12 " " " 12 " " "	.....	Notch
14 x 14 " " " 14 " " "	.....	Noted
16 x 16 " " " 16 " " "	.....	Novice
18 x 18 " " " 18 " " "	.....	Nude

POST BASE

6 x 6 inch Post.....	Nuptial
8 x 8 " "	Nudge
10 x 10 " "	Nugget
12 x 12 " "	Numb
14 x 14 " "	Numeral
16 x 16 " "	Nurse
18 x 18 " "	Nurture

